



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/903,901	07/12/2001	David Leon	975.349USW1	2729
32294	7590	06/23/2005	EXAMINER	
SQUIRE, SANDERS & DEMPSEY L.L.P.			NGUYEN, STEVEN H D	
14TH FLOOR			ART UNIT	
8000 TOWERS CRESCENT			PAPER NUMBER	
TYSONS CORNER, VA 22182			2665	

DATE MAILED: 06/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/903,901

Applicant(s)

LEON, DAVID

Examiner

Steven HD Nguyen

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-12 is/are rejected.
- 7) ☒ Claim(s) 13 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/12/01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gilbert (USP 6763274) in view of Montgomery (IEEE).

Regarding claim 8, Gilbert discloses a method and system comprising two endpoints (Fig 2, ref 210 and 220) communicating with each other by means of a packet-switched network (Fig 2, Ref 200), the endpoints (Fig 2, Ref 210 and 220) being adapted to estimate jitter from packet arrival times and to modify silence period lengths according to the latest estimate by using adaptation algorithms (Fig 3, Ref 305 for estimating a jitter based on the arrival time of the packets and using this information to adjust the silent period Fig 3, Ref 330 and 355, col. 1, lines 48-58). However, Gilbert fails to disclose said endpoints are adapted to measure a response time of the system at a given time instant, the response time being defined as the time elapsed between the capture of a given frame of speech at one endpoint and its play out at the other endpoint plus the same quantity in the other direction, and to use the response time as a parameter in the adaptation algorithms. In the same field of endeavor, Montgomery discloses a method and system for measuring a response time at given instant which includes a time elapsed between the capture of a given frame of speech at one endpoint and its play out at the other

Art Unit: 2665

endpoint plus the same quantity in the other direction, and to use the response time as a parameter in the adaptation algorithms (See Page 1024-1025, Sec B. Round trip measurement).

Since, a method and system for using the delay between the time of generating a voice packet and time of play out the voice packet is well known and expected in the art. Therefore, it would have been obvious to one of ordinary skill in the art to implement a method and system for measuring the delay between the time of generating a voice packet and time of play out the voice packet for this information in the adaptation algorithm as disclosed by Montgomery into the teaching of Gilbert. The motivation would have been to improve the overall performance of the packet network.

3. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilbert and Montgomery as applied to claim 8 above, and further in view of Ramjee (IEEE).

Regarding claim 9, Gilbert and Montgomery fail to disclose endpoints are adapted to verify that for certain adaptation points the play out of a packet can be expressed as $p=r+B$, where r is a packet reception time and B is a buffer delay chosen by using the algorithms, and to synchronize the play out for other packets with the previous packet play out. In the same field of endeavor, Ramjee discloses a method and system for determining a target play out time for a voice packet based on the sum of arrival time a and a time b that packet stored in the buffer (See page 681, Sec 3, $p = b + a$) in order to synchronize the packets to be played out.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method and system for determining a target play out time for a packet based on the receiving time and buffer delay as disclosed by Ramjee into the teaching of

Art Unit: 2665

Gilbert and Montgomery. The motivation would have been to improve the overall performance of the packet network.

Regarding claim 10, Gilbert and Montgomery fail to disclose said endpoints are adapted to use different ones of said adaptation algorithms. However, Montgomery discloses a plurality of adaptation algorithms for use to implement into the systems (See Pages 1024-1026, Sec. 3).

Therefore, it would have been obvious to one of ordinary skill in the art to apply the adaptation algorithms to the stations wherein each station has a different adaptation algorithm into Gilbert and Montgomery's station because each adaptation algorithm is independent from each other. The motivation would have been to improve the overall performance of the packet network.

4. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilbert (USP 6763274) in view Larson (USP 4569042).

Regarding claim 11, Gilbert discloses a method of using adaptation algorithms for estimating jitter from packet arrival times and for modifying silence period lengths according to the latest estimate, in communications between two endpoints in a packet-switched network system (Fig 3, Ref 305 for estimating a jitter based on the arrival time of the packets and using this information to adjust the silent period Fig 3, Ref 330 and 355, col. 1, lines 48-58). However, Gilbert fails to disclose measuring a response time of the system at a given time instant, the response time being defined as the time elapsed between the capture of a given frame of speech at one endpoint and its play out at the other endpoint plus the same quantity in the other direction, the measuring comprising the steps of sending a response time request packet from a first endpoint to a second endpoint at a time t_r ; receiving the response time request packet at

Art Unit: 2665

said second endpoint at a time rr ; sending a response time indication packet from said second endpoint to said first endpoint at a time si ; receiving the response time indication packet at said first endpoint at a time ri ; and computing the response time on the basis of the sending and receiving times in said first endpoint, and using the response time as a parameter in the adaptation algorithms. In the same field of endeavor, Larson discloses measuring a response time of the system at a given time instant, the response time being defined as the time elapsed between the capture of a given frame of speech at one endpoint and its play out at the other endpoint plus the same quantity in the other direction (Fig 2, Ref 200-205 are using to determining the round trip delay from the time of generating a packet to the time of disassembling the packet), the measuring comprising the steps of sending a response time request packet from a first endpoint to a second endpoint at a time sr (col. 10, lines 55-60); receiving the response time request packet at said second endpoint at a time rr (col. 10, lines 55-60); sending a response time indication packet from said second endpoint to said first endpoint at a time si (col. 10, lines 60-65); receiving the response time indication packet at said first endpoint at a time ri (See col. 10, lines 60-65); and computing the response time on the basis of the sending and receiving times in said first endpoint (Col. 11, lines 1-3 and col. 12, lines 28 to col. 13, lines 14), and using the response time as a parameter in the adaptation algorithms (Fig 2, Ref 202).

Since, a method and system for using the delay between the time of generating a voice packet and time of play out the voice packet is well known and expected in the art. Therefore, it would have been obvious to one of ordinary skill in the art to implement a method and system for measuring the delay between the time of generating a voice packet and time of play out the voice packet for this information in the adaptation algorithm as disclosed by Larson into the

Art Unit: 2665

teaching of Gilbert. The motivation would have been to improve the overall performance of the packet network.

Regarding claim 12, Larson discloses the response time request packet sent from said first endpoint includes information identifying one of the packets which has been sent at a time s' by said second endpoint (Fig 5b) and received at a time r' by said first endpoint since its latest adaptation (Fig 5b), and wherein the response time indication packet sent from said second endpoint includes information identifying one of the packets which has been sent at a time s by said first endpoint and received at a time r by said second endpoint since its latest adaptation (Fig 5c and col. 10, line 55 to col. 13, lines 20).

Allowable Subject Matter

5. Claims 13-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven HD Nguyen whose telephone number is (571) 272-3159. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D. Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2665

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Steven HD Nguyen
Primary Examiner
Art Unit 2665
6/16/05